

What is claimed is:

1. A method of treating or preventing an inflammatory disease or disorder comprising administering to an animal in which such treatment or prevention is desired an antibody or fragment thereof that specifically binds TNF-gamma-beta protein in an amount effective to treat or prevent the inflammatory disease or disorder.

2. The method of claim 1 wherein the animal is human.

3. The method of claim 1 wherein the antibody or fragment thereof specifically binds a TNF-gamma-beta protein selected from the group consisting of:

(a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;

(b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;

(c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;

(d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;

(e) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;

(f) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and

(g) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055.

4. The method of claim 3 wherein the antibody or fragment thereof is a monoclonal antibody.

5. The method of claim 3 wherein the antibody or fragment thereof is a human antibody.

6. The method of claim 3 wherein the antibody or fragment thereof is a humanized antibody.

7. The method of claim 3 wherein the inflammatory disease or disorder is inflammatory bowel disease.

8. The method of claim 3 wherein the inflammatory disease or disorder is encephalitis.

9. The method of claim 3 wherein the inflammatory disease or disorder is atherosclerosis.

10. The method of claim 3 wherein the inflammatory disease or disorder is psoriasis.

11. A method of treating or preventing inflammation comprising administering to an animal in which such treatment or prevention is desired an antibody or fragment thereof that specifically binds TNF-gamma-beta protein in an amount effective to treat or prevent the inflammation.

12. The method of claim 11 wherein the animal is a human.

13. The method of claim 11 wherein the antibody specifically binds a TNF-gamma-beta protein selected from the group consisting of:

(a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;

(b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;

(c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;

(d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;

(e) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;

(f) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and

(g) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055.

14. The method of claim 13 wherein the antibody or fragment thereof is a monoclonal antibody.

15. The method of claim 13 wherein the antibody or fragment thereof is a human antibody.

16. The method of claim 13 wherein the antibody or fragment thereof is a humanized antibody.

17. A method of treating or preventing an autoimmune disease or disorder comprising administering to an animal in which such treatment or prevention is desired an antibody or fragment thereof that specifically binds TNF-gamma-beta protein in an amount effective to treat or prevent the autoimmune disease or disorder.

18. The method of claim 17 wherein the animal is human.

19. The method of claim 17 wherein the antibody or fragment thereof specifically binds a TNF-gamma-beta protein selected from the group consisting of:

(a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;

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- (b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;
 - (c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;
 - (d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;
 - (e) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;
 - (f) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and
 - (g) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055.

20. The method of claim 19 wherein the antibody or fragment thereof is a monoclonal antibody.

21. The method of claim 19 wherein the antibody or fragment thereof is a human antibody.

22. The method of claim 19 wherein the antibody or fragment thereof is a humanized antibody.

23. The method of claim 19 wherein the autoimmune disease or disorder is systemic lupus erythematosus.

24. The method of claim 19 wherein the autoimmune disease or disorder is arthritis.

25. The method of claim 24 wherein the autoimmune disease or disorder is rheumatoid arthritis.

26. The method of claim 19 wherein the autoimmune disease or disorder is multiple sclerosis.

27. The method of claim 19 wherein the autoimmune disease or disorder is Crohn's disease.

28. The method of claim 19 wherein the autoimmune disease or disorder is autoimmune encephalitis.

29. A method of treating or preventing graft versus host disease (GVHD) comprising administering to an animal in which such treatment or prevention is desired an antibody or fragment thereof that specifically binds TNF-gamma-beta protein in an amount effective to treat or prevent the GVHD.

30. The method of claim 29 wherein the animal is a human

31. The method of claim 29 wherein the antibody or fragment thereof specifically binds a TNF-gamma-beta polypeptide selected from the group consisting of:

- (a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;
- (b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;
- (c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;
- (d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;
- (e) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;
- (f) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and

(g) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055.

32. The method of claim 31 wherein the antibody or fragment thereof is a monoclonal antibody.

33. The method of claim 31 wherein the antibody or fragment thereof is a human antibody.

34. The method of claim 31 wherein the antibody or fragment thereof is a humanized antibody.

35. A method of killing a cell of hematopoietic origin comprising contacting a TNF-gamma-beta protein with a cell of hematopoietic origin.

36. The method of claim 35 wherein the TNF-gamma beta protein is selected from the group consisting of:

(a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;

(b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;

(c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;

(d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;

(e) a protein whose sequence consists of a fragment of at least 30 contiguous amino acid residues of the polypeptide of SEQ ID NO:20 that has TNF-gamma-beta functional activity.

(f) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;

(g) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;

(h) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and

(i) a protein whose sequence consists a fragment of at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055 that has TNF-gamma-beta functional activity.

37. The method of claim 36 wherein the TNF-gamma-beta protein is radiolabeled.

38. The method of claim 37 wherein the radiolabel is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{131}I ;
- (c) ^{111}In ;
- (d) ^{99}Tc ;
- (e) ^{177}Lu ;
- (f) ^{90}Y ;
- (g) ^{166}Ho ; and
- (h) ^{153}Sm .

39. The method of claim 36 wherein the TNF-gamma-beta protein is conjugated to a cytotoxic agent or cytotoxic pro-drug.

40. The method of claim 36 wherein the cell of hematopoietic origin is a T cell.

41. The method of claim 40 wherein the T cell is cancerous.

42. A method of killing a cell of hematopoietic origin comprising administering to an animal in which such killing of hematopoietic cells is desired, a TNF-gamma-beta protein in an amount effective to kill the cell.

43. The method of claim 42 wherein the animal is a human.

44. The method of claim 42 wherein the TNF-gamma-beta protein is selected from the group consisting of:

- (a) a protein whose sequence consists of amino acid residues 1 to 251 of SEQ ID NO:20;
- (b) a protein whose sequence consists of amino acid residues 62 to 251 of SEQ ID NO:20;
- (c) a protein whose sequence consists of amino acid residues 72 to 251 of SEQ ID NO:20;
- (d) a protein whose sequence consists of amino acid residues 101 to 251 of SEQ ID NO:20;
- (e) a protein whose sequence consists of a fragment of at least 30 contiguous amino acid residues of the polypeptide of SEQ ID NO:20 that has TNF-gamma-beta functional activity.
- (f) a protein whose sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;
- (g) a protein whose sequence consists of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055;
- (h) a protein whose sequence consists of the amino acid sequence of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055; and
- (i) a protein whose sequence consists a fragment of at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 203055 that has TNF-gamma-beta functional activity.

45. The method of claim 44 wherein the TNF-gamma-beta protein is radiolabeled.

46. The method of claim (a) wherein the radiolabel is selected from the group consisting of:

- (i) ^{125}I ;
- (j) ^{131}I ;
- (k) ^{111}In ;
- (l) ^{99}Tc ;
- (m) ^{177}Lu ;
- (n) ^{90}Y ;
- (o) ^{166}Ho ; and
- (p) ^{153}Sm .

47. The method of claim 44 wherein the TNF-gamma-beta protein is conjugated to a cytotoxic agent or cytotoxic pro-drug.

48. The method of claim 44 wherein the cell of hematopoietic origin is a T cell.

49. The method of claim 48 wherein the T cell is cancerous.